

The nature of a dik is very probably, but that the ordinary integument consists of two carpellary leaves, is not I think proven. My own opinion is that it is not precisely homologous either to the carpellary leaves or to the ovular integuments of *Aspidosperma*, that *Gymnosperma* and *Aspidosperma* are not modifications one of the other but - if we enter into the derivative hypothesis to that extent separate descended out of a common type in which the various organs ^{or surroundings} including the nucleus were as yet but very little differentiated and that this differentiation has been so various in the different branches that the parts produced cannot always be strictly compared with each other either as to number or relative arrangement. Strasburger is an ardent disciple of Haeckel, and like Selpino gives full vent to imagination in the sketching out of genealogical trees. I do not believe that there is a tittle of evidence to show that *Aspidosperma* is descended from *Coniferae* any more than that *Compositae* are descended from *Lobelia*.

25, WILTON PLACE.
S.W.

Dec 9 1872

My dear Gray,

In consequence of your note to Hooker I have sent you by post 45. 11 part 8 of Hooker's leaves and will send the future parts regularly at 7/6 postage included since the 3^d part of the ^{1st} vol. issued. I have taken upon myself the whole charge of the work and am sorry to say it is a very heavy one which prevents our going on as regularly as it could wish. The plates of another part - chiefly *Compositae* and *Rubiaceae* are all ready but the descriptions are waiting till I get the corresponding portion of your *Genera Plantarum* out of the printer's hands. I cannot induce them to proceed more rapidly than one sheet per week

which the printing will still take a couple of months at least I have sent to you all that have been as yet definitively struck off but there are already six more sheets in type I hope to send you two this week -

I regret Hooker's oversight about the fruit of *Lymphocarpus* I am afraid your acuteness with details may such notwithstanding the time we have bestowed on the work, in Compositae especially where the characters are so vague and slight - I fear I may not always have been careful enough in verifying appearances - I have never forgot what Antoine Laurent Lavoisier once said to me that one cannot expect to give good generic characters without working up all the species - and working up all the 10,000 species of Compositae would have been a hopeless undertaking.

~~rather~~ at 72 - fortunately Compositae are generally so easily softened in cold water and the internal structure of the ovary and fruit is so uniform that I have been able to examine many more species of the large genera within a given time than I could of almost any other order.

I have all but finished *Dietyledon* for *Flora Australiensis*. I am now only working up the figs which I had delayed in hopes of receiving that part of the *Pododromus* - but I now find that it will be many months before Bureau has got through them and I want to begin printing. In doing *Coniferae* I have necessarily had to look at Strasburger's book which seems to be the result of very careful observation and is beautifully illustrated. I cannot go quite with him as to the homology of the integuments of the nucleus. That the cup of *Taxus* is of

and if the simile of a genealogical tree
is to be made use of it must be very
differently understood - a question which
I may perhaps take up in my next
address

I read your note on *Gymnocarpus*
of the Linnean last Thursday, pray
send the rest of the (the
synopsis of species) as soon as convenient

Ever yours

George Deakam